

## DETAILED ACTION

### ***Claim Objections***

1. Claim 19 and 20 are objected to because of the following informalities: claim 19 and 20 are duplicate claims. Appropriate correction is required.

### ***Drawings***

2. Figure 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Davey et al. (5258981), and in view of applicant's submitted prior art (background of the invention and summary of the invention).

6. As to claim 1, Davey et al disclose a method of connecting a mobile device to a network having associated channels carrying signals and the method comprises: scanning selected subsets of channels until a signal is identified in a channel (column 2, lines 33-column 3, lines 32; column 6, lines 7-20); and establishing a connection between the mobile device and the network associated with the channel carrying the identified signal (column 2, lines 33-column 3, lines 32; column 5, lines 7-17)

Davey et al do not disclose that the signals are encoded.

However, the applicant's submitted prior art discloses that each cellular service site typically provides encoded signals on a number of distinct channels to allow for technologies such as frequency hopping ([0003]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to scan or establish connection with encoded channel to allow for technologies such as frequency hopping.

As to claim 2, as applied to claim 1, Davey et al fail to disclose the encoded signal is a GSM encoded signal and the network associated with the GSM encoded signal is a GSM network.

However, the applicant's submitted prior art discloses that encoded signal is a GSM encoded signal and the network associated with the GSM encoded signal is a GSM network to be in compliance with the GSM standard ([0004]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have encoded signal to be a GSM encoded signal and the network associated with the GSM encoded signal is a GSM network to be in compliance with the GSM standard.

As to claim 3, as applied to claim 1, Davey et al. disclose initializing a timer (Fig 7, label 50 and 58) after scanning a subset; and waiting until expiry of the timer before scanning a next selected subset (Fig 7; column 7, line 57- column 8 line 13).

As to claim 4, as applied to claim 1, Davey et al. disclose subsequently selected subset is distinct from a previously selected subset (Fig 7; column 7, line 57- column 8 line 13).

As to claim 5, as applied to claim 4, Davey et al. disclose the subsequently selected subset is complementary to the previously selected subset (Fig 7; column 7, line 57- column 8 line 13).

As to claim 6, as applied to claim 1, Davey et al. disclose including the step of assembling a complete list of channels carrying encoded signals in all channels prior to establishing the connection (column 2, lines 33-column 3, lines 32; column 6, lines 8-20).

As to claim 7 and 8, as applied to claim 6, Davey et al. disclose the step of assembling a complete list of channels carrying encoded signals includes scanning all

channels in a frequency band to identify encoded signals or scanning a subset of channels, complementary to the selected subset, to identify the presence of the encoded signal (column 2, lines 33-column 3, lines 32; column 6, lines 8-20).

As to claim 9, as applied to claim 6, Davey et al. do not disclose the step of establishing the connection includes registering the mobile device to an accessible network with an associated encoded signal having the strongest power.

However, the applicant's submitted prior art teaches the step of establishing the connection which includes registering the mobile device to an accessible network with an associated encoded signal having the strongest power to receive better signal ([0004] and [0015]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to establish connection by registering the mobile device to an accessible network with associated encoded signal having the strongest power to obtain better signal.

As to claim 10, as applied to claim 6, Davey et al. do not disclose the step of establishing the connection includes the step of registering the mobile device for emergency service to the network with an associated encoded signal having the strongest power.

However, the applicant's submitted prior art teaches the step of establishing the connection includes the step of registering the mobile device for emergency service to the network with an associated encoded signal having the strongest power to follow the GSM standards ([0004] and [0015]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to establish connection by registering the mobile device for emergency service to the network with an associated encoded signal having the strongest power to follow GSM standards.

As to claim 11, as applied to claim 1, Davey et al. do not disclose the step of scanning a selected subset includes the steps of: creating a list of potential channels corresponding to the channels in the selected subset carrying signals having power in excess of a predetermined threshold; and analyzing each of the entries in the list of potential channels to identify channels carrying encoded signals.

However, the applicant's submitted prior art teaches the step of scanning a selected subset includes the steps of: creating a list of potential channels corresponding to the channels in the selected subset carrying signals having power in excess of a predetermined threshold; and analyzing each of the entries in the list of potential channels to identify channels carrying encoded signals to improve battery life while performing channel scans ([0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to include the step of scanning a selected subset includes the steps of: creating a list of potential channels corresponding to the channels in the selected subset carrying signals having power in excess of a predetermined threshold; and analyzing each of the entries in the list of potential channels to identify channels carrying encoded signals to improve battery life while performing channel scans.

As to claim 12, as applied to claim 1, Davey et al. disclose a first selected subset of channels corresponds to even numbered channels in a frequency band, and a subsequently selected subset of channels corresponds to odd numbered channels in the frequency band.

As to claim 13, Davey et al. disclose a mobile device comprises a channel subset selector (Fig 6 label 35) and a signal detector (column 7, line 57-column 8, line 13).

Davey et al fail to disclose the signal detector that can detect encoded signal and a network device registrar.

However, the applicant's submitted prior art teaches a mobile device that can detect encoded signal and a network device registrar [0012-0016] to allow technologies such as frequency hopping ([0003]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have a signal detector that can detect encoded signal and a network device registrar to allow technologies such as frequency hopping.

As to claim 14, as applied to claim 13, Davey et al. disclose a timer (Fig 7 label 50 and 58).

As to claim 15, as applied to claim 13, Davey et al. disclose a signal detector, but fails to disclose the detector is a GSM signal detector.

However, the applicant's submitted prior art discloses GSM encoded signal is the standard ([0004]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have a GSM encoded signal detector (column 7, line 57-column 8, line 13) to be in compliance with the GSM standard.

As to claim 16, as applied to claim 13, Davey et al. disclose a signal detector (column 7, line 57-column 8, line 13) that includes means for requesting a complementary subset of channels when a channel carrying a signal is identified.

Davey et al. do not disclose the detector can detect encoded signal.

However, the applicant's submitted prior art discloses GSM encoded signal is the standard ([0004]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have an encoded signal detector to be in compliance with the GSM standard.

As to claim 17, as applied to claim 13, Davey et al. disclose a signal detector (column 7, line 57-column 8, line 13) that includes means for requesting a complete subset of channels when a channel carrying a signal is identified.

Davey et al. do not disclose the detector can detect encoded signal.

However, the applicant's submitted prior art discloses GSM encoded signal is the standard ([0004]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have an encoded signal detector to be in compliance with the GSM standard.

As to claim 18, as applied to 14, Davey et al. disclose a timer (Fig 7 label 50 and 58) that includes means for instructing the channel selector (Fig 6 label 35) to select the subsequent subset upon expiry of the delay if the signal detector did not identify a channel carrying a signal.

Davey et al. do not disclose the signal is encoded.

However, the applicant's submitted prior art discloses GSM encoded signal is the standard ([0004]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have the timer includes means for instructing the channel selector to select the subsequent subset upon expiry of the delay if the encoded signal detector did not identify a channel carrying an encoded signal in order be in compliance with the GSM standard.

As to claim 19 and 20, as applied to claim 13, Davey et al. do not disclose network device registrar that includes means for registering the mobile device on the accessible network associated with the identified channel carrying the highest power encoded signal.

However, the applicant's submitted prior art discloses the step of establishing the connection which includes registering the mobile device to an accessible network with an associated encoded signal having the strongest power to receive better signal ([0004] and [0015]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to have the network device registrar that

includes means for registering the mobile device on the accessible network associated with the identified channel carrying the highest power encoded signal to obtain better signal.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ICHIEH CHENG whose telephone number is (571)270-1941. The examiner can normally be reached on Monday to Thursday 7:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/551,422  
Art Unit: 4183

Page 11

/Ichieh Cheng/  
12/12/07  
Examiner, Art Unit 4183

/I. C./

/Len Tran/  
Supervisory Patent Examiner, Art Unit 4183